

TRIO RONALD E. McNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM

UNDERGRADUATE RESEARCH JOURNAL OF ABSTRACTS

at the University of Illinois at Urbana-Champaign



While every care has been exercised in compiling and publishing the information contained in these pages, please forgive any errors or omissions.

Acknowledgments

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The TRIO McNair Scholars Undergraduate Research Journal is the official publication of the Ronald E. McNair Scholars Program at the University of Illinois at Urbana-Champaign. The journal includes abstracts of the students' final paper and represents combined efforts of students and their research mentors. The views expressed in the papers and abstracts are not intended to represent the views, beliefs, interests, values, or practices of the University of Illinois at Urbana-Champaign.

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LEGACY OF DR. RONALD ERVIN McNAIR

*“Whether or not you reach your goals
in life depends entirely on how well
you prepare for them and how badly
you want them.*

You’re eagles!

Stretch your wings and y to the sky.”

-Dr. Ronald Ervin McNair



DR. RONALD ERVIN McNAIR, the second African American to fly in space, was born October 21, 1950, in Lake City, South Carolina to Carl and Pearl McNair. He attended North Carolina A&T State University in Greensboro, where, in 1971, he graduated magna cum laude with a B.S. degree in physics. In 1976, at the age of 26, he earned his Ph.D. degree in physics from the prestigious Massachusetts Institute of Technology. Ronald E. McNair was nationally recognized for his work in the field of laser physics. In 1978, he was one of 35 applicants selected from a pool of ten thousand for NASA’s space shuttle program and assigned as a mission specialist aboard the 1984 - ight of the shuttle Challenger.

In addition to his academic achievements, he was the recipient of three honorary doctorates and numerous fellowships and commendations. He was also a sixth degree black belt in karate and an accomplished jazz saxophonist. He was married to Cheryl Moore and had two children, Reginald Ervin and Joy Cheray.

On the morning of January 28, 1986, McNair and his six crew members died in an explosion aboard the space shuttle Challenger. In his memory, members of Congress provided funding for the Ronald E. McNair Post- Baccalaureate Achievement Program to encourage low income, first generation college students to enroll in graduate studies. This program is dedicated to the high standard of achievement that Ronald E. McNair’s life represented.

THE NATIONAL McNAIR SCHOLAR PLEDGE©

I _____ will strive to honor and respect the legacy set forth by Dr. Ronald E. McNair and former McNair scholars I will work earnestly toward the realization of my educational goals I will embrace the challenge of attaining baccalaureate and post baccalaureate education Through hard work, perseverance, and persistence. I will strive to overcome any obstacles, barriers and limitations That might hinder, derail, or prevent my educational attainment.

I will endeavor to achieve excellence
By conceiving of and believing in excellence in my personal, professional and academic endeavors.
I will observe high ethical, moral, academic standards.

I understand that I must be trustworthy, honorable and noble
Respect myself, my peers and the people who contribute to my personal and academic success
I will graciously extend myself and service to the uplifting of future TRIO students and promising scholars
I will be a part of the solution and not the problem;

I am a McNair Scholar and I believe in the words of Dr. McNair:
“Whether or not [I] reach [my] goals in life depends entirely on how well [I] prepare for them
And how badly [I] want them.”

With this pledge, I hereby accept the responsibilities and privileges of induction into the Ronald E. McNair Post baccalaureate Achievement Program.

*Conceived and Authored by
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McNair Program at the University of Maryland, College Park and
Cheryl Bailey Gittens, Former Director, McNair Scholars Program at
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With contributions by members of the national McNair Scholars community.*

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Jennifer Aguayo	Community Health
Oludemilade Akinrotimi	Biology
Brandon Boston	Communication
Jamine Brown	Human Development & Family Studies
Ivy Hernandez Delgado	Psychology
Aneisha Dunmore	Human Development & Family Studies
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Angelica Sanchez	Urban Planning*
Diamond Stevens	Health
Jasmine Patron Vargas	Latino/a & Women's Studies
Gabriel Velarde	Engineering
Jarvis Young	English

*Note: Efforts were made to ensure the accuracy of all information, including names, rank, and topics. Please forgive any oversights and notify the office. All abstracts included were those available at the time of publication. * indicates abstracts not included.*

University of Illinois at Urbana-Champaign
2014-2015 Research Institute Faculty Mentors

Note: All Faculty Mentors are affiliated with the University of Illinois at Urbana-Champaign.

Flavia Andrade	Associate Professor	Kinesiology & Community Health
Renee Baillargeon	Professor	Psychology
Ryan Bailey	Professor	Chemistry
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Jason Chambers	Associate Professor	Advertising
Rosanna Giordano	Professor	Illinois National History Survey
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Helen Neville	Associate Professor	Psychology
Ralph Nuzzo	Professor	Chemistry
Justin Rhodes	Associate Professor	Psychology
Kristina Riedel	Senior Lecturer	Linguistics
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Felipe Soto-Adams	Researcher I	Illinois National History Survey
Karen Tabb Dina	Assistant Professor	School of Social Work
Angie Wiley	Associate Professor	Human Development & Family Studies
Assata Zerai	Associate Professor	Sociology

TRIO Ronald E. McNair Post-Baccalaureate Achievement Program

Program Description

Established on the campus in 1990, the UIUC TRIO Ronald E. McNair Post-Baccalaureate Achievement Program (McNair Scholars Program) is funded by the U.S. Department of Education. The program provides research, mentoring, advising, and graduate school preparation opportunities for eligible rising juniors and seniors to promote their academic excellence and pursuit of a PhD. TRIO McNair Scholars attend relevant workshops and seminars throughout the academic year, engage in a 10-week Summer Research Institute, and commit to preparing themselves for doctoral studies following the completion of undergraduate studies.

Vision

We envision a program in which all McNair Scholars achieve academic and personal success so they can become the next generation of scientists, researchers, and professors. We seek to empower scholars to believe that the vision they have for the world can be realized through their research and service efforts in the academy.

Mission

The mission of the program is to prepare participants to be the next generation of scientists, researchers, and professors through rigorous graduate school preparation, academic development, and research training.